

Activity_main.xml (1)

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/black"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_weight="1"
        android:background="@color/black"
        android:gravity="bottom"
        android:orientation="vertical"
        android:paddingEnd="30dp"
        android:paddingBottom="20dp">
        <TextView
            android:id="@+id/input"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:gravity="end"
            android:textColor="@color/white_text"
            android:textSize="50sp"
            tools:text="5+10-3"
            android:fontFamily="@font/roboto"/>
        <TextView
            android:id="@+id/output"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:gravity="end"
            android:textColor="@color/white_text"
            android:textSize="60sp"
            tools:text="12"
            android:fontFamily="@font/roboto"/>
    </LinearLayout>
    <TableLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:stretchColumns="*">
        <TableRow>
            <androidx.appcompat.widget.AppCompatButton
                android:id="@+id/button_clear"
```

Activity_main.xml (2)

```
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_clear"
    style="@style/CustomButtonStyle_white"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginStart="10dp"
    android:layout_marginEnd="10dp"
    android:text="DL" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_bracket_left"
    style="@style/CustomButtonStyle_white"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:text="(" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_bracket_right"
    style="@style/CustomButtonStyle_white"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:text=")" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_division"
    style="@style/CustomButtonStyle_orange"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:layout_marginBottom="10dp"
    android:text="÷" />
</TableRow>
<TableRow>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_7"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="10dp"
        android:text="7" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_8"
```

Activity_main.xml (3)

```

<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_8"
    style="@style/CustomButtonStyle_gray"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:text="8" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_9"
    style="@style/CustomButtonStyle_gray"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:text="9" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_multiply"
    style="@style/CustomButtonStyle_orange"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:layout_marginBottom="10dp"
    android:text="x" />
</TableRow>
<TableRow>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_4"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="10dp"
        android:text="4" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_5"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:text="5" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_6"
        style="@style/CustomButtonStyle_gray"

```

Activity_main.xml (4)

```
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_6"
    style="@style/CustomButtonStyle_gray"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:text="6" />
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_subtraction"
    style="@style/CustomButtonStyle_orange"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:layout_marginBottom="10dp"
    android:fontFamily="@font/roboto_medium"
    android:text="-" />
</TableRow>
<TableRow>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_1"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="10dp"
        android:text="1" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_2"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:text="2" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_3"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:text="3" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_addition"
```

Activity_main.xml (5)

```
<androidx.appcompat.widget.AppCompatButton
    android:id="@+id/button_addition"
    style="@style/CustomButtonStyle_orange"
    android:layout_width="wrap_content"
    android:layout_height="90dp"
    android:layout_marginEnd="10dp"
    android:layout_marginBottom="10dp"
    android:text="+" />
</TableRow>
<TableRow>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_percent"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="10dp"
        android:text="%" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_0"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:text="0" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_dot"
        style="@style/CustomButtonStyle_gray"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:text="." />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_equals"
        style="@style/CustomButtonStyle_orange"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:layout_marginEnd="10dp"
        android:layout_marginBottom="10dp"
        android:text="=" />
</TableRow>
</TableLayout>
```

MainActivity

```
package com.example.calculator
import ...
class MainActivity : AppCompatActivity() {
    private lateinit var binding: ActivityMainBinding
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityMainBinding.inflate(layoutInflater)
        enableEdgeToEdge()
        setContentView(binding.root)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        binding.buttonClear.setOnClickListener {
            binding.input.text = ""
            binding.output.text = ""
            binding.buttonBracketLeft.setOnClickListener {
                addToInputText("(")
            }
            binding.buttonBracketRight.setOnClickListener { addToInputText(")") }; binding.button0.setOnClickListener {
                addToInputText("0") }; binding.button1.setOnClickListener { addToInputText("1") }; binding.button2.setOnClickListener {
                addToInputText("2") }; binding.button3.setOnClickListener { addToInputText("3") }; binding.button4.setOnClickListener {
                addToInputText("4") }; binding.button5.setOnClickListener { addToInputText("5") }; binding.button6.setOnClickListener {
                addToInputText("6") }; binding.button7.setOnClickListener { addToInputText("7") }; binding.button8.setOnClickListener {
                addToInputText("8") }; binding.button9.setOnClickListener { addToInputText("9") }; binding.buttonDot.setOnClickListener {
                addToInputText(".") }; binding.buttonDivision.setOnClickListener { addToInputText("/") }; binding.buttonMultiply.setOnClickListener {
                addToInputText("*") }; binding.buttonSubtraction.setOnClickListener { addToInputText("-") }; binding.buttonAddition.setOnClickListener {
                addToInputText("+") }; binding.buttonPercent.setOnClickListener { addToInputText("%") }; binding.buttonEquals.setOnClickListener {
                showResult() }
        }
        private fun addToInputText(value: String) {
            binding.input.append(value)
        }
        private fun getInputExpression(): String {
            return binding.input.text.toString()
        }
        private fun showResult() {
            try {
                val expression = getInputExpression().replace(oldValue: "%", newValue: "/100")
                val result = ExpressionBuilder(expression).build().evaluate()
                binding.output.text = ("=${DecimalFormat(pattern: "0.#####").format(result)}")
            } catch (e: Exception) {
                binding.output.text = "Error"
            }
        }
    }
}
```

Intro

```
package com.example.calculator

import ...

class Intro : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_intro)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        android.os.Handler(Looper.getMainLooper()).postDelayed({
            val intent = Intent(packageContext, MainActivity::class.java)
            startActivity(intent)
        }, delayMillis: 2000)
    }
}
```

Activity_intro.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:background="@color/black"
    tools:context=".Intro">
    <ImageView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="100dp"
        android:layout_marginEnd="100dp"
        android:adjustViewBounds="true"
        android:scaleType="centerCrop"
        android:src="@drawable/image" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="15dp"
        android:textSize="50sp"
        android:textColor="#2962FF"
        android:text="Calculator"
        android:fontFamily="@font/roboto_medium" />
</LinearLayout>
```

Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="Calculator"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Calculator"
        tools:targetApi="31">
        <activity android:name=".Intro" android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity
            android:name=".MainActivity"
            android:exported="true">
        </activity>
        <meta-data
            android:name="preloaded_fonts"
            android:resource="@array/preloaded_fonts" />
    </application>
</manifest>
```


Результат:

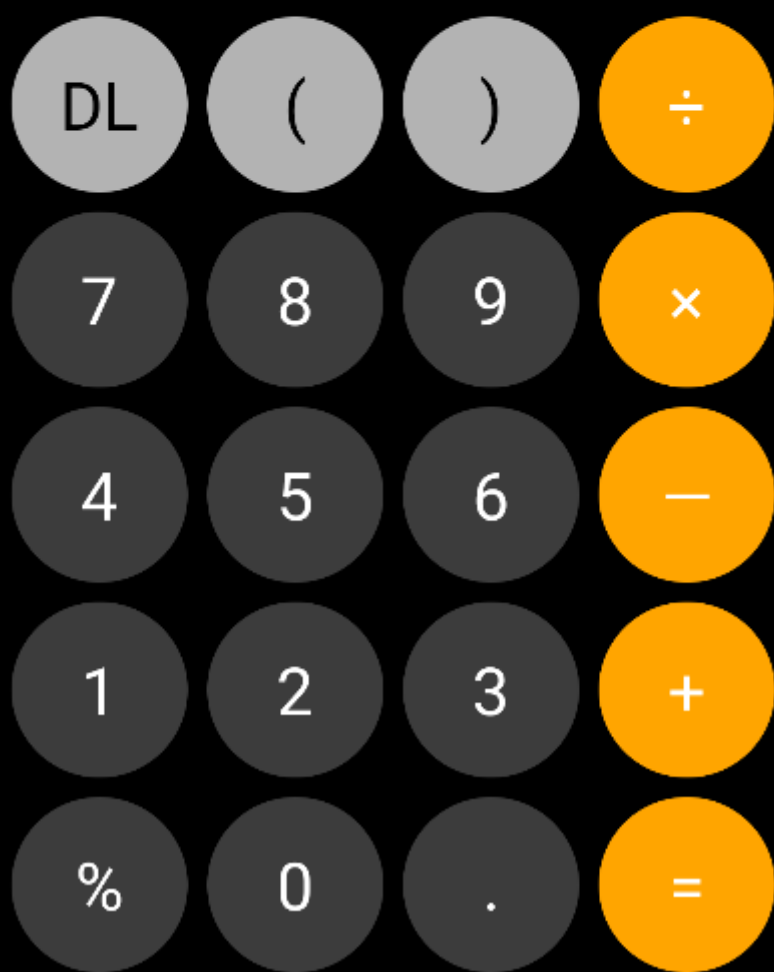
Интро:



Calculator

Калькулятор:

$$2+2*2$$
$$=6$$



$$(2+2)*2$$
$$=8$$

